

At the goods yards individual wagons are combined into trains at the commencement of the journey, resorted at intermediate yards where, if necessary, they are recombined into fresh trains and finally they are dispersed at the end of the journey. The first requisite, for a goods station in a large industrial centre is a group of sidings for the reception and dispatch of the freight trains. On these sidings all the incoming wagons are received, and thence they are taken, as required, to a section of the great goods shed where they will be unloaded. Later in the day wagons loaded with goods to be forwarded will be worked from the shed to the sidings. Thus the work performed at goods stations has two main phases - shed operation and yard operations. At the goods shed goods are transferred from road vehicles to rail wagons and vice versa. Here, therefore, the aim is to get rid as soon as possible of everything that comes into the shed, for it is meant to be a transit shed, not a warehouse. In order that large quantities of goods may pass without difficulty through the goods stations everything is done to make the flow of traffic continuous.

References

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A TECHNOLOGICALLY PROMISING SOLUTION TO THE PROBLEM OF MOBILITY IN A GLOBALIZED WORLD

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After the industrial revolution, life has become much more meaningful and faster. For the last hundred years people need a faster and more technically advanced vehicle, sometimes even safety is inferior to speed and ergonomic problems are taking to the back burner.

And the approximate one hundred years ago was proposed, but the concept was not realized: A vactrain (or vacuum tube train) is a proposed design for very-high-speed rail transportation. It is a maglev (magnetic levitation) line using partly evacuated tubes or tunnels. Reduced air resistance could permit vactrains to travel at very high speeds with relatively little power –up to 6,400–8,000 km/h (4,000–5,000 mph). This is 5–6 times the speed of sound in Earth's atmosphere at sea level. Vactrains might use gravity to assist their acceleration. If these trains achieve the predicted speeds, they could surpass aircraft as the world's fastest mode of

public transportation. However, without major advances in tunneling and other technology, vactrains would be prohibitively expensive.

Benefits: Due to the lack of air resistance and friction, very high speeds can be achieved, higher than for any other ground mode of transport. Absence of wear of pipes and wagons due to lack of contact with them. Potentially low cost of travel. Fully automatic routing. It can be combined with a gravity train.

Disadvantages: High cost of infrastructure. Interference from a strong magnetic field on sensitive devices, such as pacemakers and magnetic disks. Deadly danger to the passenger during depressurization.

Now this concept is developing, but the most successful and potentially realizable is the so-called Hyperloop: At once three companies-competitors are engaged in this technology, published in 2013 by Elon Musk. This is Hyperloop Transportation Technologies Inc., Virgin Hyperloop One and the company of the author of technology - SpaceX.

Whether Hyperloop will become a commercial project is unclear. Apparently, the creation of Hyperloop is technically possible - probably this will happen in the coming years. However, the high cost of construction and maintenance can become a problem for Hyperloop. It is assumed that Hyperloop will be at least cheaper than magnetic-pillar trains, whose development was stopped precisely because of the high cost of this promising technology. According to the concept of Musk, a ticket from San Francisco to Los Angeles (about 600 kilometers) on the Hyperloop shuttle should cost \$ 20, that is several times cheaper than an airplane. Opening of the Center for Transport Innovations in Ukraine (HypeUA). It is planned to open a test site near the city of the Dnieper, and this city will be connected with Kyiv in the future.

But still it would be a very promising replacement for obsolete slow or fast, but expensive technologies for moving to long distance.

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